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Communicating with Nonindustrial Private Forest-land Owners: Getting Programs on Target

Thomas W. Birch
Nancy A. Pywell

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The Authors

Thomas W. Birch is a research forester in the Forest Inventory, Analysis, and Economics Project, Northeastern Forest Experiment Station, USDA Forest Service, Broomall, Pennsylvania. Nancy A. Pywell is Assistant Professor of Natural Resources Extension Education, Department of Forestry, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL. This paper was prepared in cooperation with Pennsylvania State University when Nancy Pywell was Assistant Professor of Forest Resources Extension there.

Abstract

Nonindustrial private forest-land (NIPF) owners can be motivated by programs directed to their needs and objectives. Seven target audiences in Pennsylvania were defined and outlets for information programs identified for each target audience. The primary objectives of each group and the benefits they expect from owning forest land were considered in the preparation of each group's program. This system is now being used by Pennsylvania State University in its forest extension program.

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Nonindustrial private forest-land owners

Throughout the United States, private forest-land owners make management decisions affecting nearly 72 percent of the nation's timberland (USDA Forest Service 1981). A diverse group of 7.8 million individuals, corporations, groups and associations control these private forest lands (Birch et al. 1982).

Much has been written about this ownership group and recent surveys of nonindustrial private forest (NIPF) land owners have sought to determine what should be done about the "problem," which many perceive to be the lack of active management and resulting low productivity on the millions of acres of privately owned forest land. Although its low productivity has been questioned (Clawson 1979), the existence of NIPF land can be looked on as an opportunity. There is a large forest resource base which we, as professionals, have an opportunity to influence. Public foresters in most states are deluged with requests for assistance, many of which may go unanswered because there are not enough trained personnel to respond to them. An organized educational program could provide much of the information these landowners want-- information currently distributed through one-to-one contacts.

Worrell and Irland (1975) discuss both public and private goals and motivations, concluding that programs aimed at motivating private forestry in the United States have had "less than spectacular" success, because incorrect agencies were chosen to conduct programs or programs were aimed inaccurately. They point out that many efforts have been aimed at landowners whose reasons for not practicing management are such that motivating them is impossible. One promising approach in formulating educational programs is to identify target audiences and direct programs to their needs. Kurtz and Lewis (1981) identified four such groups in the Missouri Ozarks. Three target groups were identified by similar techniques in Wisconsin (Marty 1983). Though interest categories may or may not be identical in other regions, the results of their studies illuminate one salient fact: "Motivations are guiding forces and knowing what they are should be the starting point for any effort to stimulate productivity."

In Pennsylvania, 78 percent (12.5 million acres) of the commercial forest land is in private ownership (Powell and Considine 1982). Though it may, in fact, be impossible to motivate some of the 490,100 forest-land owners in Pennsylvania, Birch and Dennis (1980) indicate that a number of identifiable landowner groups could be reached effectively. By analyzing the characteristics of these groups, especially their reasons for owning forest land and harvesting or not harvesting timber from it, a motivational plan targeted specifically at each group may be developed.

The objective of this paper is to provide information useful in formulating and targeting educational programming for nonindustrial private forest landowners. Some of these suggestions have been tried in different states with various degrees of success. The authors have modified particular approaches when they failed to generate the desired result. Some have not been tried, but are based upon characteristics of land owners and motivational theory. The characteristics of groups identified in this paper were estimated from the forest-land owner study conducted by the USDA Forest Service's Northeastern Forest Experiment Station and the analysis done in cooperation with Pennsylvania State University.

The survey

The 1977 Pennsylvania landowner survey generated data on a variety of topics, including size and location of ownership, tenure, size of trees, and past harvest experience. Two basic areas, (1) ownership characteristics, objectives, and attitudes, and (2) facts

concerning harvest and utilization of forest products, have been further analyzed in an attempt to target extension and service forestry programs.

Table 1: Topics analyzed in the 1977 Pennsylvania landowner survey

Ownership characteristics, objectives, and attitudes	Harvest and utilization of forest products
Size of ownership	Past history of harvesting
Occupation	Individual selecting timber
Reasons for owning	Method of harvest
Primary benefits expected	Product combinations harvested
Magazines subscribed to	
Reasons for harvesting and not harvesting	
Intention to harvest in future	

Eleven topics (Table 1) were analyzed for eight NIPF owner groups (Fig. 1) within Pennsylvania. Since size of ownership has a decided influence on willingness and ability to manage forestland economically (Kessler 1978, Thompson and Jones 1981, Row 1978), acreage of ownership was selected as a primary characteristic of each ownership group. Past studies (Marler and Graves 1974, Webster and Stoltenberg 1959) have also indicated that farm and nonfarm owners may have substantially different objectives and motivations for forest management.

Survey data on topics listed in Table 1 were combined with data in Figure 1 to create ownership profiles that included the two or three most common responses to survey questions within each group. Data presented are for the state as a whole unless otherwise indicated. Summaries of data were also compiled by regions to permit more specific targeting of programs on a regional basis within Pennsylvania.

Survey results

The survey indicated that, in Pennsylvania, forest land is owned for the following reasons (in descending order of preference by acres owned): (1) recreation, (2) investment, (3) part of farm, (4) farm and domestic use, (5) other (includes: oil, gas, or mineral extraction and watershed protection), (6) aesthetics, (7) part of residence, (8) timber production.

Farm and nonfarm groups differed significantly in their primary reasons for owning forest land (Fig. 2). Farmers were more likely to indicate "farm and domestic use" and "part of

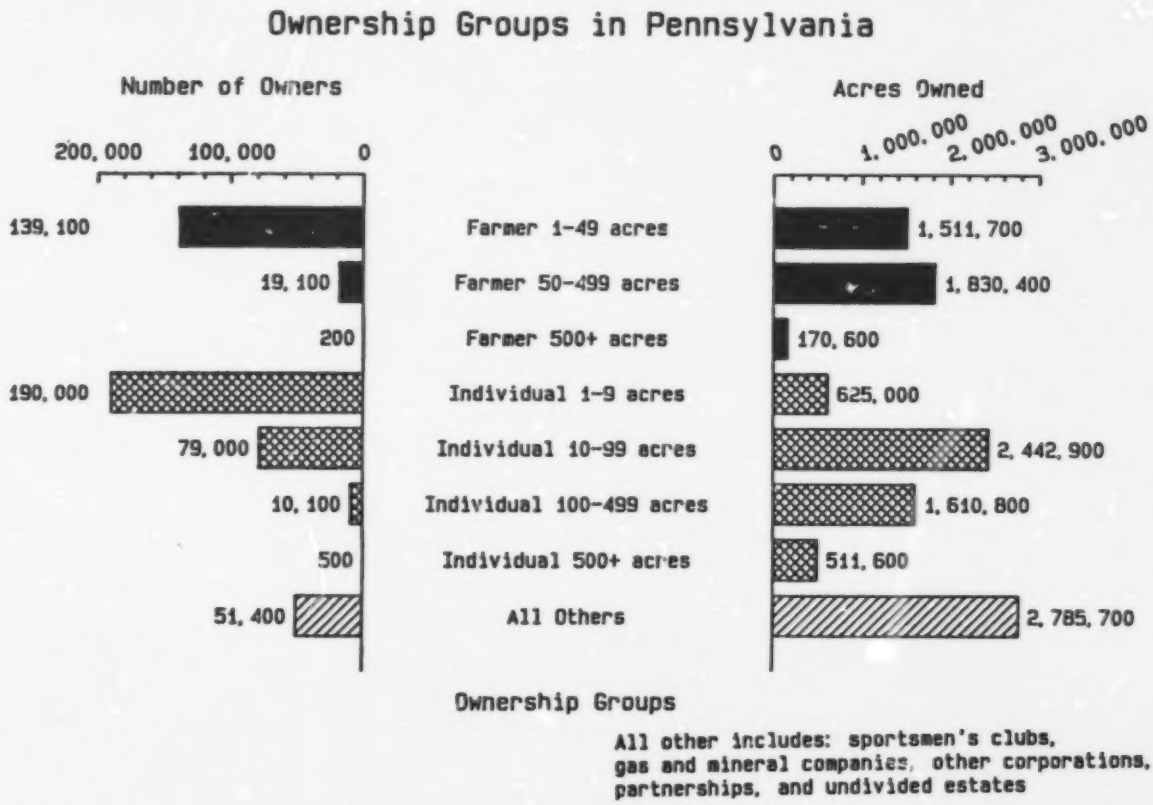

Figure 1.--Distribution of private ownership groups in Pennsylvania.

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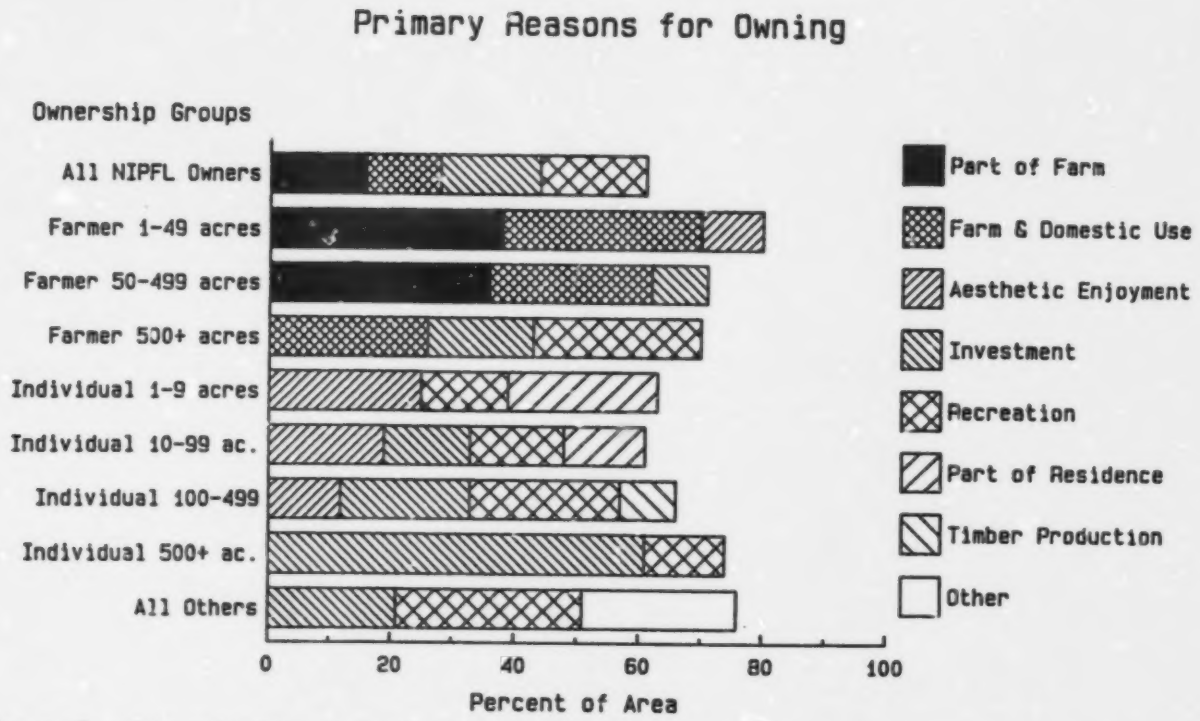

Figure 2.--Distribution of private ownership groups, by primary reason for owning forest land.

farm" as primary reasons. With the exception of ownerships less than 100 acres, nonfarm owners listed recreation and investment most often as primary reasons for forest ownership. Nonfarm individuals with less than 100 acres gave aesthetic enjoyment as their primary reason for owning forest land.

Benefits expected from forest land ownership show similar patterns (Fig.3), indicating that motivation for ownership of 24 percent of the state's forest land is involved with investment, 21 percent with aesthetics, and 17 percent with recreation. Only 6 percent of Pennsylvania's nonindustrial private forestland is owned by people who expect income from timber to be their primary benefit in the next 5 years.

With such low concern for timber production, it may seem surprising that 73 percent of Pennsylvania's forest products are harvested from NIPF owners' property (Considine and Powell 1980). When motivation for harvesting or not harvesting timber is examined, it is apparent that economics play a major role in the decision to harvest. Landowrers who hold forest land for recreational reasons, or simply because it is part of their farm, are likely to harvest if they need money or are offered a "good price." Binkley's observation (1979) that owners respond to high prices even if timber production is a low-priority objective appears to hold true in Pennsylvania. Small landowners are more likely to cut trees for their own use, while larger landowners tend to harvest when timber is mature, especially if motivated by a need for extra income.

Belief that harvesting timber will

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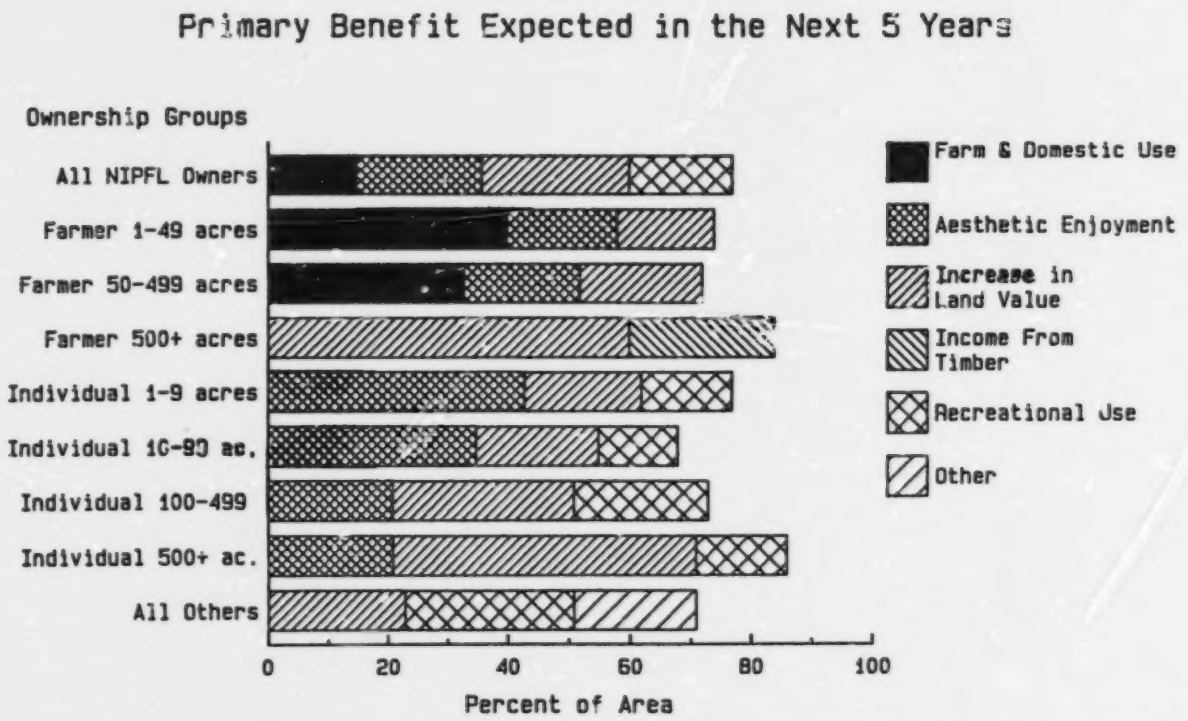

Figure 3.--Distribution of private ownership groups, by primary benefit expected in the next 5 years.

ruin the scenery in a woodland is a primary deterrent to harvesting forest products for many owners. As Pennsylvania's second-growth forests reach maturity in the near future, this belief seems to be the main motivating force preventing owners from harvesting.

Reasons for not harvesting may have far less impact on future timber supplies than reasons for harvesting. Turner et al. (1977) indicate that a landowner's stated intent to harvest or not harvest may alter in less than 5 years, especially if economic incentives are brought to bear. Survey data indicate that 28 percent of landowners who have harvested in the past plan never to harvest again. Of those who have never harvested, 56 percent indicate that they never will.

With the exception of very small ownerships (individuals; 1-9 acres), the majority of the acreage is controlled by landowners who expressed a willingness to harvest (Fig. 4). The 8 percent who plan to harvest within 10 years of the survey control 2,687,200 acres. The 34 percent whose harvesting plans are indefinite control 5,372,800 acres. When demand for timber increases, followed by increasing prices for forest products, research indicates that many NIPF owners will harvest as their trees reach maturity, despite expressed opposition to harvesting.

Targeting NIPF owners

We can use information provided by the landowner survey to motivate increased management. The question must be posed: management for what? Close to 2 million acres in the state are owned primarily for recreation.

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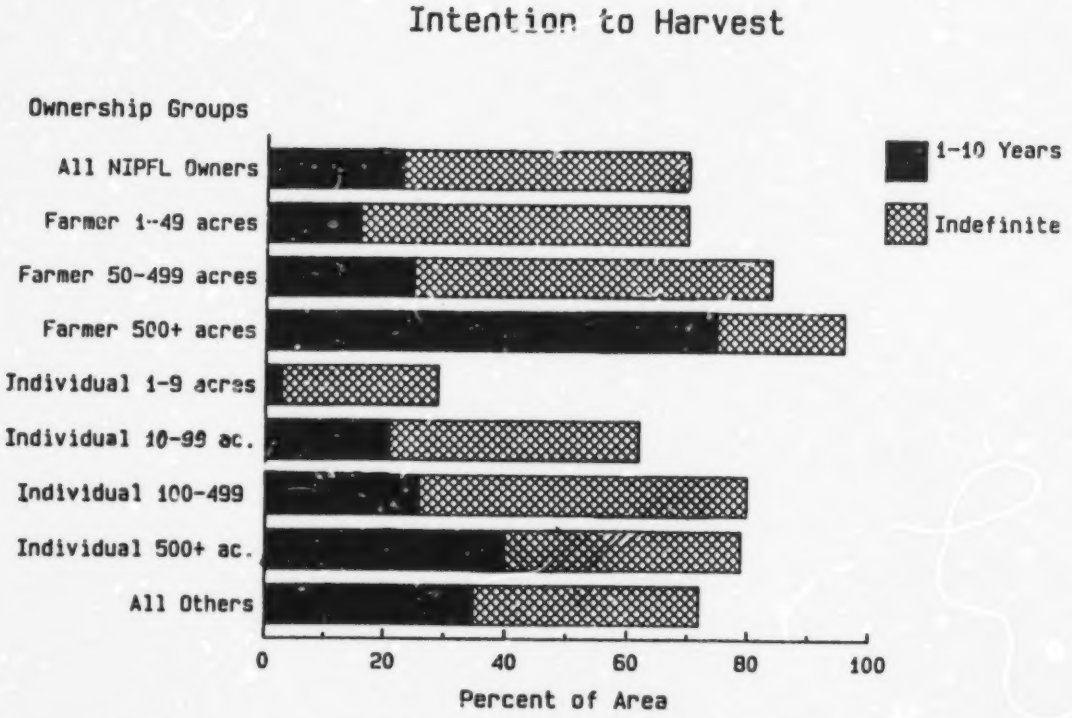

Figure 4.--Distribution of private ownership groups, by intention to harvest timber from their forest land.

Recreation includes hunting, camping, and fishing, as well as hiking and more passive recreation.

Management for wildlife and outdoor recreation requires a variety of silvicultural and management practices, which could include selection cuts, regeneration cuts, and thinnings. More than 1,800,000 acres owned for investment will increase in value under a management plan as well as providing added income from timber harvesting if the owners so desire. Undisturbed hardwood stands in Pennsylvania increased in value at a rate of 4.7 percent per year over the last decade (Herrick 1984).

The 1,767,400 acres that are parts of farms in Pennsylvania can provide added income and a sustained yield of fuelwood, lumber, and fenceposts under well-designed management. There is no owner objective specified in the survey that would not be more achievable under planned management. Our challenge is to inform and educate NIPF owners to see and accept the benefits of forest management.

An extension objective is to educate and inform NIPF owners to increase their practice of forest management. Who are we trying to educate and how should we go about it? Group profiles generated by analysis of survey data provide part of the picture. Retired people, farmers, executives, and professionals control 46 percent of Pennsylvania's forest land (5,291,100 acres). Retired people alone control more than 1,800,500 acres, with full-time farmers placing second (1,480,600 acres), executives third (1,167,800 acres) and professionals

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fourth (842,200 acres).

Motivations and occupations help identify target groups. The 1977 survey queried landowners about membership in conservation organizations and subscriptions to conservation-oriented magazines. No single organization listed had more than 8 percent of all landowners as members. Owners of more than 60 percent of the state's private forestland belong to no such organization.

Magazines subscribed to presented a different picture. Approximately 25 percent of individual forest landowners receive Pennsylvania Game News. They own approximately 33 percent of the state's private forestland. The most widely read magazines included in the survey are: Pennsylvania Game News, Agway Cooperator, Field and Stream, Sports Afield, and National Wildlife.

We have identified the following target audiences and present programming ideas for each.

Target: People interested in wildlife

A major portion of Pennsylvania's wildlife resource is produced on NIPF lands. The way in which these lands are managed will directly affect how well the state's wildlife needs are satisfied. With this background in mind, several avenues for reaching large groups of landowners present themselves. Motivations, benefits expected, and magazines subscribed to make it clear that interest in wildlife is significant within the NIPF owner population. Therefore, slightly popularized articles on the benefits of forest management for wildlife should be placed in as many of the publications mentioned as possible. Programs on forest management for wildlife benefits delivered to sportsmen's clubs will also reach large numbers of NIPF owners.

Topics to be considered for reaching landowners with wildlife interests should include: silviculture systems (even-age vs. uneven-age management), basic forest ecology; dendrology (including identification of species that provide food and/or cover), integrated pest management, soil and water conservation, and multiple use management.

Target: Retirees

The retired people who control nearly 2 million acres of forest resources may be reached through local or state chapters of the American Assocation of Retired Persons (AARP) as well as through articles in Modern Maturity (a publication of the Association). Although this publication was not included in the survey, we believe that Modern Maturity is received in a significant number of NIPF owners' homes. The editors are reluctant to publish an article dealing strictly with forest management, but articles featuring seniors who are actively managing forest land may "sell". Similar "human interest" articles in the local press may raise awareness of forest resources. AARP conducts frequent tours, and may be interested in a well-organized forest management tour. Elderhostel, Inc., an international nonprofit organization that provides educational programs for older adults, is another avenue for reaching this group, with programs at colleges and universities throughout the country. An intensive short course on forest management offered at Penn State in the summer of 1984 attracted 20 forest landowners, with average holdings of approximately 80 acres. On course evaluations participants said they had "benefitted significantly" from the program. Although this course was not directed specifically at retirees, a majority of the participants were of or approaching retirement age. Forestry specialists need only develop forestry programs for presentation and offer them at a variety of times and locations convenient to retirees.

Retirees who are not interested in wildlife or general forestry topics may be motivated by programs and information on taxation and estate planning,

marketing forest products, and determining financial maturity of resources they control. Information on selecting and working with consulting foresters would also be of special value to this group.

Retirees have a substantial impact on forest management, as they hold close to 2 million acres of forest land in Pennsylvania. Other states may find similar patterns and chose to focus on this group as a priority audience. We may find retirees a rewarding group to begin with, as we will not be competing with their careers for their attention.

Target: Professionals and executives

Professional people and executives may be reached on the job through articles in such publications as the Wall Street Journal, and Business Week. Both have published articles and notes dealing with forestry in the past. Such articles, and presentations to business and professional clubs and fraternal organizations, should focus on economic benefits of management, forest taxation, and marketing. Many members of this group may also be reached during leisure time through avenues listed for wildlife-oriented landowners.

As women become increasingly involved in forest management as well as the business and professional world at large, magazines such as Working Woman should be considered for articles on forestry investments. Workshops for bankers, real estate brokers, CPAs, and tax assessors could also be of value in getting information on forestry into the hands of professionals and executives. Financial (tax, investments, marketing) aspects of forestry should be presented to this audience, and multiple use and basic forest ecology would probably be of interest as well.

Target: Farmers

Farmers should be informed about basic techniques of fuelwood management, benefits of multiple-use management, marketing procedures, erosion and sedimentation control, forest taxation, and forestry consultants. Information on tree farming might be particularly pertinent to this group. Avenues for information exchange appropriate to reaching this group include articles in Agway Cooperator, Pennsylvania Farmer, Pennsylvania Game News, and Field and Stream. County Extension programs and newsletters provide outlets for educational efforts. Conservation district newsletters should not be overlooked. Agricultural fairs and events such as "Ag Progress Day" and the annual Farm Show are appropriate for displays and dissemination of information.

Target: Middle size ownerships

Programming aimed at owners of tracts between 10 and 499 acres will be the most cost-efficient, as these people control more than half of Pennsylvania NIPF resources. The group "all others" controls 2,785,700 acres. Programming directed toward this group through sportsmen's clubs, corporate newsletters, or other channels could be extremely cost-effective.

Personnel of the Pennsylvania Division of Forestry have reported enthusiasm from snowmobile club members introduced to forestry concepts through slide-tape presentations generated by extension personnel. Program materials geared for such audiences would be useful.

Target: Small ownerships

The 309,900 owners (63 pecent), with fewer than 10 acres of forest land, control 1,028,000 acres of forest land (8 percent of the private timberland). It is probably not cost-effective to work with this group at present, but if landowner associations become more widespread, this group may become more influential. Organized groups of small landowners could provide a forum for information exchange as well as forming a nucleus for political action. Associations can improve the marketing picture by

aggregating sufficient timber to achieve economies of scale, and may hire consultants to assist association members in management planning.

The most cost-efficient way to serve the small ownership audience at present is through newsletters. Every NIPF landowner contacted should appear on a mailing list to receive information regularly. Frequency of stimulation (in this case reading information about forest management) affects motivational impact. Displays, newsletters, or newspaper articles every month could make programs more effective (Korman 1974).

Target: All NIPF owners

Essential needs bring people to certain locations, regardless of age, occupation, or interests. Shopping centers, libraries, schools, and county buildings serve thousands of people daily. Displays on general forestry topics and lists of sources of information set up in such facilities would be visible to virtually any NIPF owner. Local newspapers should be considered, perhaps for syndicated articles.

Programming for the general public can be varied. Topics of interest may include: forest-wildlife interactions, products that forests provide, basic tree identification, pruning and insect control, multiple benefits of our forestland, forests as watersheds, forests as recreation spots, forests as an investment. Home economics extension newsletters reach hundreds of homes monthly.

Youth education could also be a focus for foresters. Ranger Rick Magazine reaches the homes of a substantial number of NIPF landowners. The use of 4-H as a vehicle for introducing new techniques to farmers through their children can work in forestry as it has with more traditional agriculture practices in the past. School programs, Future Farmers of America, and Scouts provide additional pre-organized audiences. The authors have met many whose interest in forestry began through such youth programs. As SAF members we should all be promoting and supporting the use of Project Learning Tree in our local school systems.

Pennsylvania is not alone

In the northern United States in 1970 more than 128.4 million acres of timberland (25.7 percent of the regional total) were owned by "farm and miscellaneous private" individuals--basically the NIPF owners described above (Marler and Graves 1974). On a national level, 296.2 million acres or 59 percent of the timberland was controlled by this group. It is projected that this group will continue to own well over 50 percent of the nation's commercial timberland through the year 2020.

Marion Clawson, in The Economics of U.S. Non-industrial Private Forests (1979), pointed out that NIPF owners produce a variety of outputs in addition to wood. Recognizing the social and economic values of these outputs, Clawson notes that "in the long run nearly all truly merchantable timber from such forests will be sold and harvested in regions where good markets exist, although the timing of such sales might be irregular and not what a forester would have recommended."

Conclusion

By encouraging management for multiple use on NIPF properties, we may not only increase their nontimber outputs, but timber outputs as well. Regionally and nationally, the motivations for forestland ownership must be examined, and programs directed toward identified audiences. Increased awareness of the benefits of forest management for wildlife, recreation, and investment, as well as timber, will motivate increased management. While poor markets, diseconomies of scale, unfavorable tax situations, and lack of knowledge will continue to serve as

disincentives to management, nothing will be more effective in improving management than accurately targeted educational programs on topics in which NIPF owners have an interest. Awareness can spur interest and action to overcome many disincentives. The Task Force on Programs to Improve Outputs from Nonindustrial Private Forests (1979) reported that "...enlightened self-interest is the most powerful and effective force in bettering forest management in the long run."

If we can make NIPF owners aware of the genuine benefits of forestland management, they will find ways--with or without federal programs--to improve their forest resources and supply multiple benefits for present and future generations. The approach outlined in the current SAF position on improving outputs from these lands is a step in the right direction.

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